May 16, 2023

Legislative Water Development Commission

# Utah Delegation for Water and Innovation



## Primary Objectives

- Identify attributes and components within Israel's water structure that could aid
   Utah in the development of a water innovation framework and hub
- Identify and create relationships that allow for ongoing collaboration
- Improve understanding of breeding seeds, and maximizing crop production.
- Create cooperative relationships and better understanding regarding desalination/reuse infrastructure and practices.
- Identify measurement, data gathering and reporting capabilities/technologies that may help increase Utah's water certainty. Also explore land/water use planning practices that could benefit growing Utah communities.



# Fast Facts About Israel

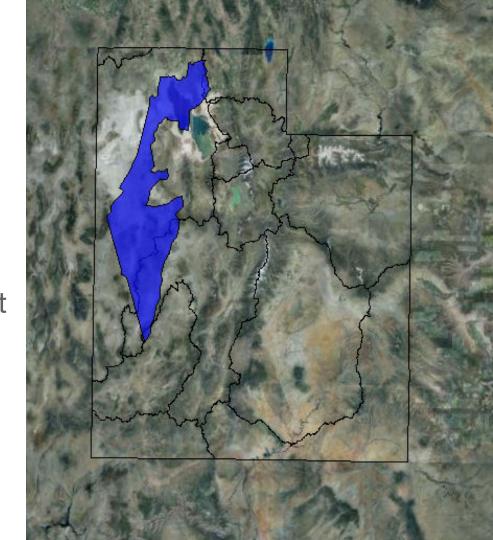
- About 10 million people
- 90% of Israel population lives in or around urban areas
- Fast growing population
- Work week Sunday -Thursday





# Fast Facts About Israel

- 1/10 the size of Utah
- More than half of the land area is in the Negev Desert





## Israel

#### Challenges

- Semi arid climate on the edge of the desert
- Isolated from neighbouring countries
- Limited water resources
- Fast growing population
- Limited energy resources

#### Solutions

- Unique water law
- National water planning, pricing and allocation of water
- Education and public awareness of water scarcity
- Innovation and adoption of water technologies



# How did Israel go from being water stressed to water rich?

- Governance structure and pricing of water
- Culture and used every drop wisely (meter every drop)
- Innovation







#### Tel Aviv Home Base

## Governance Structure

Israel Water Authority - one table that makes all of the decisions for the country

Mekorot - one water wholesaler

Water Suppliers ~50

Municipality ~83





# Water Pricing/Tariffs





# Culture and Counting Drops

Long history of water scarcity

Using drip irrigation since the 1960's

Water education in schools





## Innovation

Israel is referred to as the start up nation

Israel Water Innovation Center and multiple innovation hubs

New supply



Technology improvements





"Irrigating the desert with purified seawater might seem to many today a delusion, but Israel should be the last state to be afraid of 'delusions' that could change the primal order by force of the power of vision, science and pioneering capability."

-Prime Minister David Ben Gurion, 1956





Desalination and Reuse

# From the Kinneret Innovation Center: Secret Ingredients

- People
- Industry Academia Startups strong relationships
- Open mind for innovation
- Fundings
- "Hutzpah"
- People







## Takeaways

- Super size our water education in the state
- Implement technology to use less water in all sectors
- Integrating land use and water planning
- Evaluate changes to how we price water
- Agriculture optimization on steroids
- More Innovation



# Questions



